

What is claimed is:

1. A fusion protein comprising:
 - i) an IgG Fc component,
 - ii) an HIV envelope component, and
 - 5 iii) a C3d component.
2. The protein according to claim 1 wherein said IgG Fc component is present in said fusion protein N-terminal to said HIV envelope component.
- 10 3. The protein according to claim 1 wherein said HIV envelope component is present in said fusion protein N-terminal to said C3d component.
- 15 4. The protein according to claim 1 wherein said IgG Fc component is present in said fusion protein N-terminal to said HIV envelope component and said HIV envelope component is present in said fusion protein N-terminal to said C3d component.
- 20 5. The protein according to claim 1 wherein said protein further comprises at least one intervening sequence between at least 2 of said components.
- 25 6. The protein according to claim 1 wherein said IgG Fc component is a human IgG Fc component.
- 30 7. The protein according to claim 1 wherein said C3d component is a human C3d.

8. The protein according to claim 1 wherein
said C3d component targets said fusion protein to
antigen presenting cells that express CD21 and
5 thereby promotes antigen presentation.

9. The protein according to claim 1 wherein
said HIV envelope component is HIV-1 gp120, gp140,
gp160, gp41, or immunogenic portion of gp120 or
10 gp41.

10. The protein according to claim 1 wherein
said HIV envelope component comprises residues of
the V3 domain of gp120 and includes a B cell
15 neutralizing antibody epitope.

11. An immunogenic composition comprising at
least one of said fusion proteins according to claim
1.
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12. The composition according to claim 11
wherein said composition further comprises a
carrier.

25 13. A complex comprising said fusion protein
according to claim 1, wherein said HIV envelope
component of said fusion protein is activated so
that intermediate conformations of conserved
neutralization epitopes of said HIV envelope
30 component are exposed.

14. A complex comprising said fusion protein according to claim 1 wherein said HIV envelope component is bound to a ligand that upregulates at least one of a CD4 binding site and a CCR5 binding site of said HIV envelope component.

15. The complex according to claim 14 wherein said ligand is an antibody, or Fab₂ or Fab fragment thereof.

16. The complex according to claim 14 wherein said ligand binds to a CCR5 binding site of said HIV envelope component and upregulates a CD4 binding site of said HIV envelope component.

17. The complex according to claim 16 wherein said ligand upregulates a CCR5 and a CD4 binding site on said HIV envelope component.

18. A method of inducing an immune response in a mammal comprising administering to said mammal an amount of said fusion protein according to claim 1 sufficient to effect said induction.

19. A nucleic acid sequence encoding said fusion protein according to claim 1.

20. An expression vector comprising the nucleic acid according to claim 19 operably linked to a promoter.